

May 5, 2006 File No. 49400.19 Nobis Engineering, Inc. 18 Chenell Drive Concord, NH 03301 Tel (603) 224-4182 Fax (603) 224-2507 www.nobisengineering.com

Mr. George Papadopolous United States Environmental Protection Agency RGP-NOI Processing Municipal Assistance Unit (CMU) 1 Congress Street, Suite 1100 Boston, MA 02114-2023

Re:

Remediation General Permit - Notice of Intent

Murphy's Mobil (Former Greene's Corner Store)

346 Whittier Highway (Route 25) Moultonboro, New Hampshire

NHDES Site #198102000-LUST-WLP3

UST Facility #0-11239

Dear Mr. Papadolpolous

Attached you will find the completed Remediation General Permit – Notice of Intent (RGP-NOI) for the above-referenced site and its additional information. Nobis Engineering, Inc. will be operating a temporary pilot-scale test of a groundwater remediation system at the site at the request of the New Hampshire Department of Environmental Services (NHDES). The pilot-scale test is anticipated to run for approximately two months; however, following that period NHDES may request that the test be continued.

If you have any questions or require additional information, please do not hesitate to contact the undersigned at (603) 224-4182.

Sincerely,

NOBIS ENGINEERING, INC.

David W. Gorhan Project Scientist

Robert B. Kleiner, P.G.

Project Manager

Attachments: RGP-NOI

cc: Mr. Richard Murphy, ERRIS, LLC, P.O. Box 1419, Center Harbor, NH 03226
New Hampshire Department of Environmental Services, Water Division, Wastewater Engineering Bureau, PO Box 95, 29 Hazen Drive, Concord, NH 03302-0095
Town Clerk, Town of Moultonborough, P.O. Box 15, Moultonborough, NH 03254

#### B. Suggested Form for Notice of Intent (NOI) for the Remediation General Permit

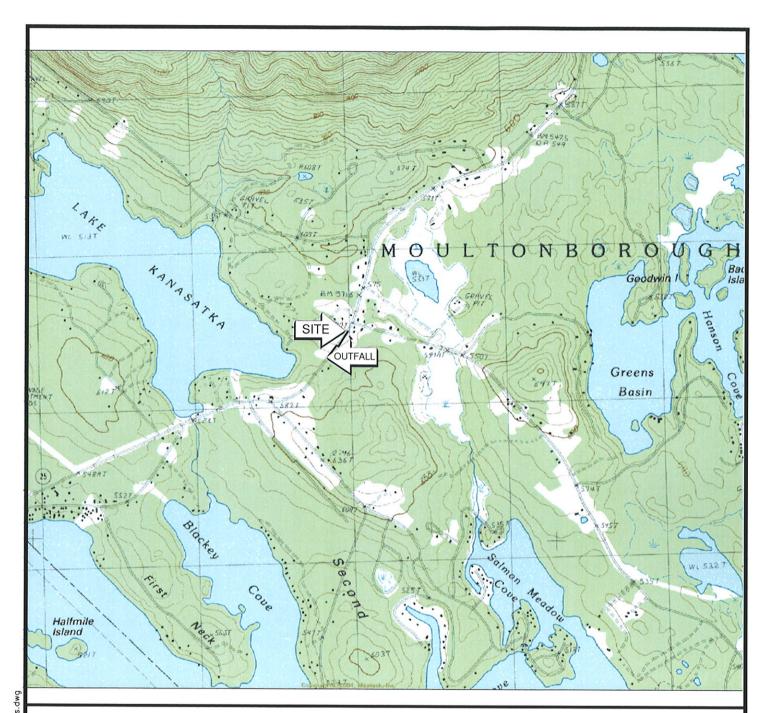
1. General site information. Please provide the following information about the site: a) Name of facility/site: Facility/site address: Murphy's Mobil Location of facility/site: longitude: 43° 43' 14" Facility SIC code(s): Street: N/A 346 Whittier Highway b) Name of facility/site owner: ERRIS, LLC c/o Richard Murphy Town: Moultonborough Email address of owner: Zip: State: County: rmsmcm@hotmail.com NH 03254 Carroll Telephone no. of facility/site owner: (603) 253-7146 Fax no. of facility/site owner: Owner is (check one): 1. Federal\_\_\_\_\_ 2. State/Tribal\_\_\_\_\_ 3. Private \( \square \) 4. other, if so, describe: Address of owner (if different from site): Street: P.O. Box 1419 Town: Center Harbor State: NH Zip: 03326 County: Belknap Operator telephone no: (603) 224-4182 c) Legal name of operator: Nobis Engineering, Inc. **Operator** fax no.: (603) 224-2507 Operator email: rkleiner@nobisengineering.com

Operator contact name and title: Robert Kleiner, Project Manager

Address of <b>oper</b>	ator (if different fi	om owner):	Street: 18 Chenell Drive						
Town: Concor	d		State: NH	Zip: 03301	County: Merrmiack				
d) Check "yes" or "no" for the following:  1. Has a prior NPDES permit exclusion been granted for the discharge? Yes No✓, if "yes," number:  2. Has a prior NPDES application (Form 1 & 2C) ever been filed for the discharge? Yes No✓, if "yes," date and tracking #:  3. Is the discharge a "new discharge"as defined by 40 CFR 122.2? Yes ✓ No  4. For sites in Massachusetts, is the discharge covered under the MA Contingency Plan (MCP) and exempt from state permitting? Yes No									
generation of dis If "yes," please I 1. site identificat 2. permit or licer 3. state agency c	e) Is site/facility subject to any State permitting or other action which is causing the generation of discharge? Yes ✓ No								
2. Discharge i	nformation. Pleas	e provide information about the di	scharge, (attachii	ng additional sheets as needed)	including:				
		for which the owner/applicant is so a high vacuum total fluids extraction			ot test operating for a period of 2 months.				
b) Provide the following information about each discharge:	owing discharge points:  Average flow .002  Is maximum flow a design value? Y  Por average flow, include the units and appropriate notation if this value is a design value or estimate if not available.  Maximum and average flow rates are estimates.								
3) Latitude and longitude of each discharge within 100 feet: pt.1:long 'lat.; pt.2: long. lat.; pt.3: long. lat.; pt.3: long. lat.; pt.4:long. lat.; pt.5: long. lat.; pt.5: long. lat.; pt.6:long. lat.; pt.7: long. lat.; pt.8:long. lat.; etc.									

4) If hydrostatic testing, total volume of the discharge (gals):	5) Is the discharge into Is discharge ongoing	The state of the s
c) Expected dates of discharge (mm/dd/yy): start 05/29/06	end 08/04/06	
d) Please attach a line drawing or flow schematic showing wate 1. sources of intake water, 2. contributing flow from the operati		

,





#### USGS TOPOGRAPHIC MAP

CENTER HARBOR, NEW HAMPSHIRE PROVISIONAL EDITION 1987

APPROXIMATE SCALE
1 INCH = 2,000 FEET



Nobis Engineering, Inc. 18 Chenell Drive Concord, NH 03301 Tel (603) 224-4182 Fax (603) 224-2507 www.nobisengineering.com



QUADRANGLE LOCATION

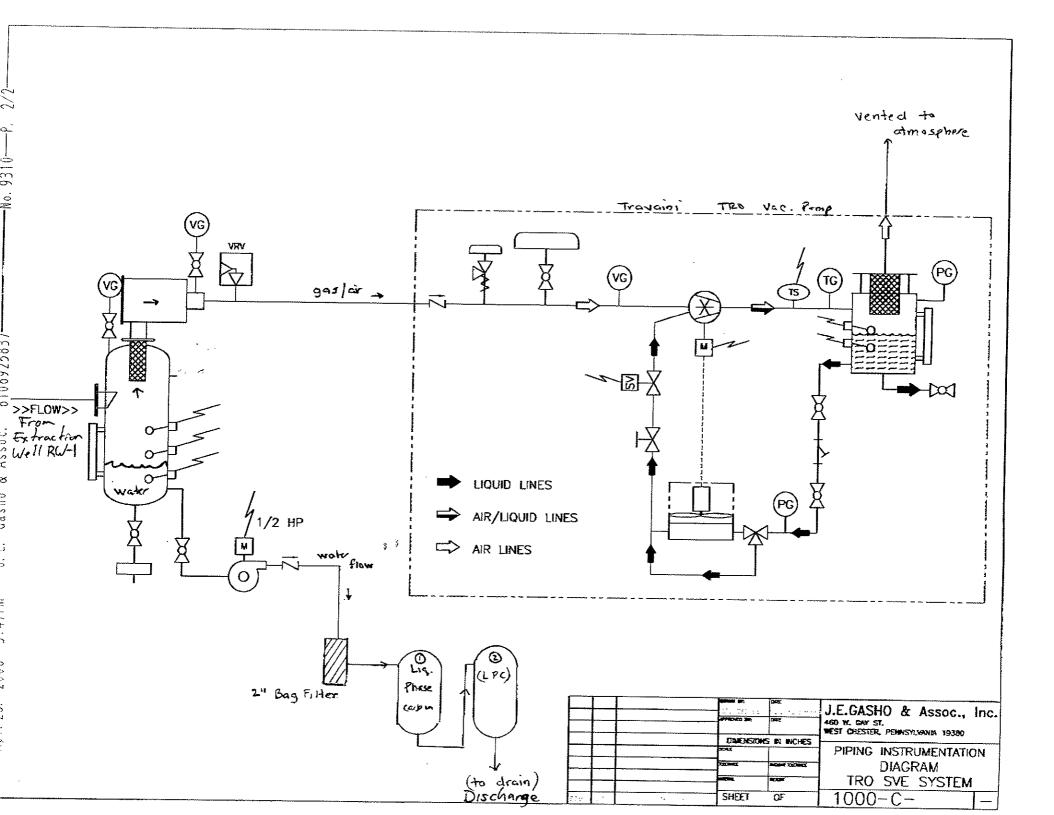
## FIGURE 1

LOCUS PLAN
MURPHY'S MOBIL
346 WHITTIER HIGHWAY
MOULTONBORO, NEW HAMPSHIRE

PROJECT:

49400.19

MAY 2006



3. Contaminant information. In order to complete this section, the applicant will need to take a minimum of one sample of the untreated water and have it analyzed for all of the parameters listed in Appendix III. Historical data, (i.e., data taken no more than 2 years prior to the effective date of the permit) may be used if obtained pursuant to: i. Massachusetts' regulations 310 CMR 40.0000, the Massachusetts Contingency Plan ("Chapter 21E"); ii. New Hampshire's Title 50 RSA 485-A: Water Pollution and Waste Disposal or Title 50 RSA 485-C: Groundwater Protection Act; or iii. an EPA permit exclusion letter issued pursuant to 40 CFR 122.3, provided the data was analyzed with test methods that meet the requirements of this permit. Otherwise, a new sample shall be taken and analyzed.

a) Based on the analysis of the sample(s) of the untreated influent, the applicant must check the box of the sub-categories that the potential discharge falls within.

Gasoline Only ✓	VOC Only	Primarily Metals	Urban Fill Sites	Contaminated Sumps	Mixed Contaminants	Aquifer Testing
Fuel Oils (and Other Oils) only	VOC with Other Contaminants	Petroleum with Other Contaminants	Listed Contaminated Sites	Contaminated Dredge Condensates	Hydrostatic Testing of Pipelines/Tanks	Well Development or Rehabilitation

b) Based on the analysis of the untreated influent, the applicant must indicate whether each listed chemical is believed present or believed absent in the potential

discharge. Attach additional sheets as needed.

PARAMETER	Believe Absent	Believe Present	# of Samples (1 min- imum)	Type of Sample (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily	value	Avg. daily value	
							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
1. Total Suspended Solids	✓		0							
2. Total Residual Chlorine	✓		0							
3. Total Petroleum Hydrocarbons	1		0							
4. Cyanide	✓		0							
5. Benzene		✓	ł	Grab	8260B	0.5	3700	1.0		
6. Toluene		✓	1	Grab	8260B	1.0	23000	0.63		
7. Ethylbenzene		✓	1	Grab	8260B	1,0	3600	0.1		
8. (m,p,o) Xylenes		✓	1	Grab	8260B	1.0	24100	0.68		
9. Total BTEX4		✓	I	Grab	8260B		54400	1.5		

<sup>&</sup>lt;sup>4</sup>BTEX = Sum of Benzene, Toluene, Ethylbenzene, total Xylenes.

PARAMETER	Believe Absent	Believe Present	# of Samples	Type of Sample (e.g.,	Analytical Method	Minimum Level (ML) of	Maximum daily	value	Avg, daily value	9
			(1 min- imum)	grab)	Used (method #)	Test Method	concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
10. Ethylene Dibromide (1,2- Dibromo-methane)	1		1	Grab	8260B	0.015	<200			
II. Methyl-tert-Butyl Ether (MtBE)	1		1	Grab	8260B	5.0	<100			
12. tert-Butyl Aicohol (TBA)	1		1	Grab	8260B	100	<3000			
13. tert-Amyl Methyl Ether (TAME)	1		W. E.	Grab	8260B	2.0	<500			
14. Naphthalene		✓	ı	Grab	8260B	20	800	0.02		
15. Carbon Tetra- chloride	<b>1</b>		1	Grab	8260B	1.0	<100			
16. 1,4 Dichlorobenzene	✓		1	Grab	8260B	1.0	<100		-	
17. 1,2 Dichlorobenzene	✓		1	Grab	8260B	1.0	<100			
18. 1,3 Dichlorobenzene	1		ı	Grab	8260B	1.0	<100			
19. 1,1 Dichloroethane	✓		ı	Grab	8260B	1,0	<100			
20. 1,2 Dichloroethane	✓		1	Grab	8260B	1.0	<100			
21. 1,1 Dichloroethylene	<b>✓</b>		1	Grab	8260B	1.0	<100			
22. cis-1,2 Dichloro- ethylene	<b>✓</b>		***	Grab	8260B	25	<100			
23. Dichloromethane (Methylene Chloride)	<b>✓</b>		1	Grab	8260B	2.0	<500			
24. Tetrachloroethylene	<b>√</b>		1	Grab	8260B	1,0	<100			

PARAMETER	Believe Absent	Believe Present	# of Samples	Type of Sample (e.g.,	Analytical Method Used	Minimum Level (ML) of Test Method	Maximum daily	value	Avg. daily Valu	e
	- 100011		(I min- imum)	grab)	(method #)		concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
25. 1,1,1 Trichloroethane	✓		1	Grab	8260B	1,0	<100			
26. 1,1,2 Trichloroethane	✓		i	Grab	8260B	1.0	<100			
27. Trichloroethylene	✓		1	Grab	8260B	1.0	<100			
28. Vinyl Chloride	✓		1	Grab	8260B	1.0	<200			
29. Acetone	✓		ı	Grab	8260B	5.0	<1000	***************************************		
30. 1,4 Dioxane	✓		0	Grab	8260B	25		***		
31. Total Phenols	✓		1	Grab	8270C	1.0	ND			
32. Pentachlorophenol	✓		1	Grab	8270C	5.0	<5			
33. Total Phthalates <sup>5</sup> (Phthalate esthers)	<b>✓</b>		1	Grab	8270C	5.0	<60			
34. Bis (2-Ethylhexyl) Phthalate [Di- (ethylhexyl) Phthalate]	✓		1	Grab	8270C	5,0	<10			
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)		✓	1	Grab	8270C					
a. Benzo(a) Anthracene		✓	I	Grab	8270C	5.0	2	5.5E-5		
b. Benzo(a) Pyrene	✓		I	Grab	8270C	10	<10			
c. Benzo(b)Fluoranthene	✓		1	Grab	8270C	10	<10			
d. Benzo(k) Fluoranthene	✓		1	Grab	8270C	10	<10			
e. Chrysene		<b>√</b>	1	Grab	8270C	10	1	2.7E-5		

<sup>&</sup>lt;sup>5</sup>The sum of individual phthalate compounds.

PARAMETER	Believe Absent	Believe Present	# of Samples	Type of Sample (e.g.,	Analytical Method Used	Minimum Level (ML) of Test Method	Maximum daily	value	Average daily v	alue
			(1 min- imum)	grab)	(method #)		concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
f. Dibenzo(a,h) anthracene	1		t	Grab	8270C	10	<10			
g. Indeno(1,2,3-cd) Pyrene	1		1	Grab	8270C	10	<10			
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)		<b>√</b>		Grab	8270C		560			
h. Acenaphthene	✓		1	Grab	8270C	1.0	<10			
i. Acenaphthylene	✓		]	Grab	8270C	10	<10			
j. Anthracene	✓		I	Grab	8270C	10	<10			
k. Benzo(ghi) Perylene	✓		1	Grab	8270C	5.0	<10			
l. Fluoranthene	✓		1	Grab	8270C	1.0	<10			
m. Fluorene		✓	1	Grab	8270C	10	10	2.7E-4		
n. Naphthalene-		✓	ı	Grab	8270C	2	530	3.2E-2		
o. Phenanthrene		<b>/</b>	1	Grab	8270C	5	20	1.5E-2		
p. Pyrene	✓		1	Grab	8270C	10	<10	5.5E-4		
37. Total Polychlorinated Biphenyls (PCBs)	<b>✓</b>		1	Grab	8082	0.35	<0.35			
38. Antimony	✓		I	Grab	200.8	5.0	<1			
39. Arsenic		<b>\</b>	I	Grab	200.8	5,0	5	1,4E-4		
40. Cadmium	✓		l	Grab	200.8	0.5	<1			
41. Chromium III	1		1	Grab	200.8		6	1.6E-4		
42. Chromium VI	<b>✓</b>		1	Grab	7196A	500	<50			

PARAMETER	Believe Absent	Believe Present	# of Samples (1 min- imum)	Type of Sample (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Avg. daily value	
							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
43. Copper		✓	1	Grab	200.8	25	7	1.9E-4		
44. Lead		✓	1	Grab	200,8	2.0	84	2.3E-3		
45. Mercury	✓		1	Grab	200.8	0.2	<1			
46. Nickel		✓	1	Grab	200.8	5,0	7	1.9E-4		
47. Selenium		1	1	Grab	200.8	5,0	3	8.2E-5		
48. Silver	✓		1	Grab	200.8	0.5	<1			
49. Zinc		√	1	Grab	200.8	20	32	8.6E-4		
50. Iron		✓	ı	Grab	200.8	100	7400	0.2		
Other (describe):										

c) For discharges where metals are believed present, please fill out the following:

Step 1: Do any of the metals in the influent have a reasonable potential to exceed the effluent limits in Appendix III (i.e., the limits set at zero to five dilutions)? Y N	If yes, which metals? Ar, Cr (III), Cu, Pb, Ni, Zn, Fe
Step 2: For any metals which have reasonable potential to exceed the Appendix III limits, calculate the dilution factor (DF) using the formula in Part I.A.3.c) (step 2) of the NOI instructions or as determined by the State prior to the submission of this NOI. What is the dilution factor for applicable metals?  Metals: Ar, Cr (III), Cu, Pb, Ni, Zn, Fe  DF: 0.9	Look up the limit calculated at the corresponding dilution factor in Appendix IV. Do any of the metals in the influent have the potential to exceed the corresponding effluent limits in Appendix IV (i.e., is the influent concentration above the limit set at the calculated dilution factor)?  YN If "Yes," list which metals:  Cu, Pb, Fe

. I reatment system information. Please describe the treatment system using separate sheets as necessary, including:										
a) A description of the treatm	a) A description of the treatment system, including a schematic of the proposed or existing treatment system:									
F	The influent will be pumped through two bag filters (100 micron) and two 30-pound granular activated carbon (GAC) vessels, connected in series, prior to discharge.									
The production of the series, prior to discharge.										
1 \ X 1 \	T				<u> </u>					
b) Identify each applicable treatment unit (check all	Frac, tank	Air stripper	Oil/water se	parator	Equalization tanks	Bag filter	GAC filter			
that apply):		✓				✓	✓			
	Chlorination Dechlorination Other (please describe):									
c) Proposed average and ma	c) Proposed average and maximum flow rates (gallons per minute) for the discharge and the design flow rate(s) (gallons per minute) of the treatment system:									
Average flow rate of discharg	ge <u>1</u>	Maximum flow	rate of treatment syste		esign flow rate of treats					
d) A description of chemical	additives being	used or planned t	o be used (attach MS	DS sheets):						
N/A		•	`							
	******									
5. Receiving surface water(s)	. Please provid	le information abo	ut the receiving water	(s), using separate sh	eets as necessary:		T			
a) Identify the discharge path	way:	Direct	Within facility	Storm drain 🗸	River/brook	Wetlands	Other (describe):			
			ÿ							
						<u> </u>				
b) Provide a narrative descrip	tion of the disc	harge pathway, in	cluding the name(s) o	of the receiving waters	s:					
The Stormdrain that we are co	onnecting to is	located at station 2	274+00, slightly south	west of the site on th	e southern side of Rov	ite 25. The drain goes	s into a 15 inch			
underdrain along the southerr Route 25 in the southwest dir	side of Route	25 and crosses to t	the northern side at ag	oproximately 270+30.	. The drain is then RC	P and runs along the i	northern side of			
266+00. Attached is a USGS	map with the	site and outfall on	it, if this is correct to	the best of your know	vledge please let me kr	28 mio a scasonai, am 10W.	iamed stream at			

c) Attach a detailed map(s) indicating the site location and location of the outfall to the receiving water:  1. For multiple discharges, number the discharges sequentially.  2. For indirect dischargers, indicate the location of the discharge to the indirect conveyance and the discharge to surface water
The map should also include the location and distance to the nearest sanitary sewer as well as the locus of nearby sensitive receptors (based on USGS topographical mapping), such as surface waters, drinking water supplies, and wetland areas.
d) Provide the state water quality classification of the receiving water B,
e) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water N/A cfs  Please attach any calculation sheets used to support stream flow and dilution calculations.
f) Is the receiving water a listed 303(d) water quality impaired or limited water? Yes No If yes, for which pollutant(s)?
Is there a TMDL? Yes No_ ✓ If yes, for which pollutant(s)?
6. Results of Consultation with Federal Services: Please provide the following information according to requirements of Part I.B.4 and Appendices II and VII.
a) Are any listed threatened or endangered species, or designated critical habitat, in proximity to the discharge? Yes No / Has any consultation with the federal services been completed?  No / or is consultation underway?  No / What were the results of the consultation with the U.S. Fish and Wikklife Service and/or National Marine Fisheries Services (eheek one):  a "no jeopardy" opinion?or written concurrence on a finding that the discharges are not likely to adversely affect any endangered species or critical habitat?
b) Are any historic properties listed or eligible for listing on the National Register of Historic Places located on the facility or site or in proximity to the discharge?  Yes No Have any state or tribal historic preservation officer been consulted in this determination (Massachusetts only)? Yes No

7. Supplemental information. :		
Please provide any supplemental information.	Attach any analytical data used to support the application.	Attach any certification(s) required by the general permit.
	<b>&gt;</b>	
	·	

## eastern analytical

professional laboratory services

Bob Kleiner Nobis Engineering 18 Chenell Drive Concord, NH 03301

MAY

Subject: Laboratory Report

Eastern Analytical, Inc. ID: 54344

Client Identification: Murphy's Mobil | 49400.19

Date Received: 4/24/2006

Dear Mr. Kleiner:

Enclosed please find the laboratory report for the above identified project. All analyses were performed in accordance with our QA/QC Program. Unless otherwise stated, holding times, preservation techniques. container types, and sample conditions adhered to EPA Protocol. Samples which were collected by Eastern Analytical, Inc. (EAI) were collected in accordance with approved EPA procedures. Eastern Analytical, Inc. certifies that the enclosed test results meet all requirements of NELAP and other applicable state certifications. Please refer to our website at www.eailabs.com for a copy of our NELAP certificate and accredited parameters.

The following standard abbreviations and conventions apply to all EAI reports:

Solid samples are reported on a dry weight basis, unless otherwise noted

< : "less than" followed by the reporting limit

TNR: Testing Not Requested

None Detected, no established detection limit ND:

RL: Reporting Limits

%R: % Recovery

Eastern Analytical Inc. maintains certification in the following states: Connecticut (PH-0492), Maine (NH005). Massachusetts (M-NH005), New Hampshire/NELAP (1012), Rhode Island (269) and Vermont (VT1012).

This report package contains the following information: Sample Conditions summary, Analytical Results/Data and copies of the Chain of Custody. This report may not be reproduced except in full, without the the written approval of the laboratory.

If you have any questions regarding the results contained within, please feel free to directly contact me or the chemist(s) who performed the testing in question. Unless otherwise requested, we will dispose of the sample(s) 30 days from the sample receipt date.

We appreciate this opportunity to be of service and look forward to your continued patronage.

Sincerely,

Lorraine Olashaw, Lab Director

# of pages (excluding cover letter)



### SAMPLE CONDITIONS PAGE

Eastern Analytical, Inc. ID#:

54344

Client: Nobis Engineering

Client Designation: Murphy's Mobil | 49400.19

Temperature upon receipt (°C): 3

Received on ice or cold packs (Yes/No): Y

•		,. •			The state of the pasts (1 control)
Lab ID	SampleID	Date Received	Date Sampled	Sample % D Matrix We	Ory ight Exceptions/Comments (other than thermal preservation)
54344.01	MW-12	4/24/06	4/24/06	aqueous	Adheres to Sample Acceptance Policy
54344.02	MW-13	4/24/06	4/24/06	aqueous	Adheres to Sample Acceptance Policy
54344.03	MW-14	4/24/06	4/24/06	aqueous	Adheres to Sample Acceptance Policy
54344,04	RW-1	4/24/06	4/24/06	aqueous	Adheres to Sample Acceptance Policy
54344.05	Trip Blank	4/24/06	4/17/06	aqueous	Adheres to Sample Acceptance Policy

Samples were properly preserved and the pH measured when applicable unless otherwise noted. Analysis of solids for pH, Flashpoint, Ignitibility, Paint Filter, Corrosivity, Conductivity and Specific Gravity are reported on an "as received" basis.

All results contained in this report relate only to the above listed samples.

References include:

- 1) EPA 600/4-79-020, 1983
- 2) Standard Methods for Examination of Water and Wastewater: Inorganics, 19th Edition, 1995; Microbiology, 20th Edition, 1998
- 3) Test Methods for Evaluating Solid Waste SW 846 3rd Edition including updates IVA and IVB
- 4) Hach Water Analysis Handbook, 2nd edition, 1992

eastern analytical, inc.

www.eailabs.com

Phone: (603) 228-0525



Eastern Analytical, Inc. ID#:

54344

Client: Nobis Engineering

Client Designation: Murphy's Mobil | 49400.19

Sample ID:	MW-12	MVV-13	MVV-14	RW-1	Trip Blank	
Lab Sample ID:	54344.01	54344.02	54344.03	54344.04	54344.05	
Matrix:	aqueous	aqueous	aqueous	agueous	aqueous	
Date Sampled:	4/24/06	4/24/06	4/24/06	4/24/06	•	
Date Received:	4/24/06	4/24/06			4/17/06	
			4/24/06	4/24/06	4/24/06	
Units:	ug/l	ug/l	ug/l	ug/l	ug/l	
Date of Analysis:	4/27/06	4/28/06	4/28/06	4/25/06	4/28/06	
Analyst:	JDS	JDS	VG	JDS	VG	
Method:	8260B	8260B	8260B	8260B	8260B	
Dilution Factor:	1	1	1	100	1	
Dichlorodifluoromethane	< 5	< 5	< 5	< 500	< 5	
Chloromethane	< 5	< 5	< 5	< 500	< 5	
√inyl chloride	< 2	< 2	< 2	< 200	< 2	
Bromomethane	< 2	< 2	< 2	< 200	< 2	
Chloroethane	< 5	< 5	< 5	< 500	< 5	
Trichlorofluoromethane	< 5	< 5	< 5	< 500	< 5	
Diethyl Ether	< 5	< 5	< 5	< 500	< 5	
Acetone	< 10	< 10	< 10	< 1000	< 10	
1,1-Dichloroethene :ert-Butyl Alcohol (TBA)	< 1	< 1	< 1	< 100	< 1	
Methylene chloride	< 30 < 5	< 30 < 5	< 30	< 3000	< 30	
Carbon disulfide	< 5	< 5	< 5 < 5	< 500 < 200	< 5	
Methyl-t-butyl ether(MTBE)	< 5	< 5	< 5	< 100	< 5 < 5	
Ethyl-t-butyl ether(ETBE)	< 5	< 5	< 5	< 500	< 5	
sopropyl ether(DIPE)	< 5	< 5	< 5	< 500	< 5	
ert-amyl methyl ether(TAME)	< 5	< 5	< 5	< 500	< 5	
rans-1,2-Dichloroethene	< 2	< 2	< 2	< 100	< 2	
1,1-Dichloroethane	< 2	< 2	< 2	< 100	< 2	
2,2-Dichloropropane	< 2	< 2	< 2	< 100	< 2	
cis-1,2-Dichloroethene 2-Butanone(MEK)	< 2	< 2	< 2	< 100	< 2	
3romochloromethane	< 10 < 2	< 10 < 2	< 10	< 1000	< 10	
Tetrahydrofuran(THF)	< 10	< 10	< 2 < 10	< 100 < 1000	< 2	
Chloroform	< 2	< 2	< 2	< 1000	< 10 < 2	
I,1,1-Trichloroethane	< 2	< 2	< 2	< 100	< 2	
Carbon tetrachloride	< 2	< 2	< 2	< 100	< 2	
,1-Dichloropropene	< 2	< 2	< 2	< 100	< 2	
Benzene	< 1	< 1	< 1	3700	< 1	
I,2-Dichloroethane	< 2	< 2	< 2	< 100	< 2	
Frichloroethene	< 2	< 2	< 2	< 100	< 2	
l ,2-Dichloropropane Dibromomethane	< 2	< 2	< 2	< 100	< 2	
Bromodichloromethane	< 2 < 2	< 2 < 2	< 2 < 2	< 100	< 2	
f-Methyl-2-pentanone(MIBK)	< 10	< 10	< 10	< 100 < 1000	< 2 < 10	
cis-1,3-Dichloropropene	< 2	< 2	< 2	< 1000	< 2	
Foluene	< 1	4	< 1	23000	< 1	
rans-1,3-Dichloropropene	< 2	< 2	< 2	< 100	< 2	
,1,2-Trichloroethane	< 2	< 2	< 2	< 100	< 2	
2-Hexanone	< 10	< 10	< 10	< 1000	< 10	
etrachloroethene	< 2	< 2	< 2	< 100	< 2	
,3-Dichloropropane	< 2	< 2	< 2	< 100	< 2	
Dibromochloromethane	< 2	< 2	< 2	< 100	< 2	
,2-Dibromoethane Chlorobenzene	< 2 < 2	< 2	< 2	< 200	< 2	
ALBOTOMOTIVE CHE	< <u> </u>	< 2	< 2	< 100	< 2	
,1,1,2-Tetrachloroethane	< 2	< 2	< 2	< 100	< 2	

Phone: (603) 228-0525



Client: Nobis Engineering

## LABORATORY REPORT

Eastern Analytical, Inc. ID#:

54344 Client Designation: Murphy's Mobil | 49400.19

Sample ID:	MW-12	MW-13	MW-14	RW-1	Trip Blank	
Lab Sample ID:	54344.01	54344.02	54344.03	54344.04	54344.05	
Matrix:	aqueous	aqueous	aqueous	aqueous	aqueous	
Date Sampled:	4/24/06	4/24/06	4/24/06	4/24/06	4/17/06	
Date Received:	4/24/06	4/24/06	4/24/06	4/24/06	4/24/06	
Units:	ug/l	ug/l	ug/l	ug/l	ug/l	
Date of Analysis:	4/27/06	4/28/06	4/28/06	4/25/06	4/28/06	
Analyst:	JDS	JDS	VG	JDS	VG	
Method:	8260B	8260B	8260B	8260B	8260B	
Dilution Factor:	1	1	1	100	1	
	· .	•				
mp-Xylene o-Xylene	< 1 < 1	330 39	< 1 < 1	15000 9100	< 1 < 1	
o-Aytene Styrene	<1	39 < 1	< 1	< 100	< 1	
Styrene Bromoform	< 2	< 2	< 2	< 200	< 2	
IsoPropylbenzene	< 1	76	< 1	300	< 1	
Bromobenzene	< 2	< 2	< 2	< 100	< 2	
1,1,2,2-Tetrachloroethane	< 2	< 2	< 2	< 100	< 2	
1,2,3-Trichloropropane	< 2	< 2	< 2	< 100	< 2	
n-Propylbenzene	< 1	230	< 1	500	< 1	
2-Chlorotoluene	< 2	< 2	< 2	< 100	< 2	
4-Chlorotoluene	< 2	< 2	< 2	< 100	< 2	
1,3,5-Trimethylbenzene	< 1	630	< 1	1200	< 1	
tert-Butylbenzene	< 1	3	< 1	< 100	< 1	
1,2,4-Trimethylbenzene	< 1	1900	< 1	4400	< 1	
sec-Butylbenzene	< 1	35	< 1	< 100	< 1	
1,3-Dichlorobenzene	< 1	< 1	< 1	< 100	< 1	
p-Isopropyltoluene	< 1	28	< 1	< 100	< 1	
1,4-Dichlorobenzene	< 1	< 1	< 1	< 100	< 1	
1,2-Dichlorobenzene	< 1	< 1	< 1	< 100	< 1	
n-Butylbenzene	< 1	140	< 1	< 100	< 1	
1,2-Dibromo-3-chloropropane	< 2	< 2	< 2	< 200	< 2	
1,2,4-Trichlorobenzene	< 1	< 1	< 1	< 100	< 1	
Hexachlorobutadiene	< 1	< 1	< 1	< 100	< 1	
Naphthalene	< 5	220	< 5	800	< 5	
1,2,3-Trichlorobenzene	< 1	< 1	< 1	< 100	< 1	

Deviations from the Report:

MW-13 Parameter: 1,3,5-Trimethylbenzene Date of Analysis: 4/28/2006 Dilution Factor: 50 MW-13 Parameter: 1,2,4-Trimethylbenzene Date of Analysis: 4/28/2006 Dilution Factor: 50

The value for n-Butylbenzene may be elevated due to non-target interference. MW-13



Eastern Analytical, Inc. ID#:

54344

Client: Nobis Engineering

Client Designation: Murphy's Mobil | 49400.19

Sample ID: RW-1

Lab Sample ID: 54344.04 Matrix: aqueous Date Sampled: 4/24/06 Date Received: 4/24/06 Units: ug/l Date of Extraction/Prep: 4/25/06 4/26/06 Date of Analysis: Analyst: **BML** Method: 8270C **Dilution Factor:** 1

Dildtion i actor.	•
Phenol	31
2-Chlorophenoi	< 1
2,4-Dichlorophenol	< 1
2,4,5-Trichlorophenol	< 1
2,4,6-Trichiorophenoi	< 1
Pentachlorophenol	< 5
2-Nitrophenol	< 1
4-Nitrophenol	< 5
2,4-Dinitrophenol	< 5
4-Chloro-3-methylphenol	< 1
4,6-Dinitro-2-methylphenol	< 5
Benzoic Acid	< 5
2-Methylphenol	210
3/4-Methylphenol	200
2,4-Dimethylphenol	120

Deviations from the Report:

RW-1 Parameter: 2-Methylphenol Date of Analysis: 4/27/2006 Dilution Factor: 5
RW-1 Parameter: 3/4-Methylphenol Date of Analysis: 4/27/2006 Dilution Factor: 5
RW-1 Parameter: 2,4-Dimethylphenol Date of Analysis: 4/27/2006 Dilution Factor: 5



Eastern Analytical, Inc. ID#:

54344

Client: Nobis Engineering

Client Designation: Murphy's Mobil | 49400.19

Sample ID:	RW-1	
Lab Sample ID:	54344.04	
Matrix:	aqueous	
	•	
Date Sampled:	4/24/06	
Date Received:	4/24/06	
Jnits:	ug/l	
Date of Extraction/Preparation	4/25/06	
Date of Analysis:	4/26/06	
Analyst:	BML.	
Method:	8270C	
	11	
Dilution Factor:		
N-Nitrosodimethylamine	< 10	
n-Nitroso-di-n-propylamine	< 10	
n-Nitrosodiphenylamine	< 10 < 10	
ois(2-Chloroethyl)ether ois(2-chloroisopropyl)ether	< 10	
ois(2-Chloroethoxy)methane	< 10	
1,3-Dichlorobenzene	< 10	
1,4-Dichlorobenzene	< 10	
1,2-Dichlorobenzene	< 10	
1,2,4-Trichlorobenzene	< 10	
2-Chloronaphthalene	< 10	
4-Chlorophenyl-phenylether	< 10	
1-Bromophenyl-phenylether	< 10	
Hexachloroethane	< 10	
Hexachlorobutadiene	< 10	
Hexachlorocyclopentadiene	< 50	
-lexachlorobenzene	< 10	
4-Chloroaniline	< 10	
2-Nitroaniline	< 50	
3-Nitroaniline	< 10	.68
4-Nitroaniline	< 10	
Benzyl alcohol Nitrobenzene	<b>20</b> < 10	
sophorone	< 10	
2,4-Dinitrotoluene	< 10	
2,6-Dinitrotoluene	< 10	
Benzidine	< 50	
3,3'-Dichlorobenzidine	< 10	
Pyridine	< 50	
Azobenzene	< 10	
Carbazole	< 10	
Dimethylphthalate	< 10	
Diethylphthalate	< 10	
Di-n-butylphthalate	< 10	
Butylbenzylphthalate	< 10	
ois(2-Ethylhexyl)phthalate	< 10	
Di-n-octylphthalate	< 10	



Eastern Analytical, Inc. ID#:

l, Inc. ID#: 54344

Client: Nobis Engineering Client Designation: Murphy's Mobil | 49400.19

Sample ID: RW-1

Lab Sample ID: 54344.04 Matrix: aqueous Date Sampled: 4/24/06 Date Received: 4/24/06 Units: ug/l Date of Extraction/Prep: 4/25/06 Date of Analysis: 4/26/06 BML Analyst: Method: 8270C 11 **Dilution Factor:** 

Naphthalene 530 2-Methylnaphthalene 310 Acenaphthylene < 10 Acenaphthene < 10 Fluorene 10 Phenanthrene 20 Anthracene < 10 Fluoranthene < 10 Pyrene < 10 Benzo[a]anthracene < 10 Chrysene < 10 Benzo[b]fluoranthene < 10 Benzo[k]fluoranthene < 10 Benzo[a]pyrene < 10 Indeno[1,2,3-cd]pyrene < 10 Dibenz[a,h]anthracene < 10 Benzo[g,h,i]perylene < 10

Dilution was required due to high levels of target and non-target analytes.



Eastern Analytical, Inc. ID#:

54344

Client: Nobis Engineering

Client Designation: Murphy's Mobil | 49400.19

Sample ID: RW-1

Lab Sample ID: 54344.04 Matrix: aqueous Date Sampled: 4/24/06 Date Received: 4/24/06 Units: ug/i Date of Extraction/Prep: 4/25/06 Date of Analysis: 4/26/06 Analyst: **BML** Method: 8270C SIM 11 **Dilution Factor:** 

Benzo[a]anthracene 2 Chrysene 1 Benzo[b]fluoranthene < 1 Benzo[k]fluoranthene < 1 Benzo[a]pyrene < 1 Indeno[1,2,3-cd]pyrene < 1 Dibenz[a,h]anthracene < 1 Benzo[g,h,i]perylene < 1

Dilution was required due to high levels of target and non-target analytes.

SIM Technique was employed to provide low level quantitation for these compounds.



Eastern Analytical, Inc. ID#:

54344

Client: Nobis Engineering

Client Designation: Murphy's Mobil | 49400.19

Sample ID:	•	RW-1
28mble 81.		1 / 4 / . 1

Lab Sample ID:	54344.04
Matrix:	aqueous
Date Sampled:	4/24/06
Date Received:	4/24/06
Units:	ug/l
Date of Extraction/Prep:	4/24/06
Date of Analysis:	4/25/06
Analyst:	MDM
Method:	8082
Dilution Factor:	1
PCB-1016	< 0.5
PCB-1221	< 0.5
PCB-1232	< 0.5
PCB-1242	< 0.5
PCB-1248	< 0.5
PCB-1254	< 0.5
PCB-1260	< 0.5



Zinc

# LABORATORY REPORT

Eastern Analytical, Inc. ID#:

54344

Client: Nobis Engineering

Client Designation: Murphy's Mobil | 49400.19

Sample ID:	RV	V-1

Lab Sample ID:	54344.04	
Matrix:	aqueous	
Date Sampled:	4/24/06	
Date Received:	4/24/06	
Chromium (VI)	< 0.05	
Antimony	< 0.001	
Arsenic	0.005	
Cadmium	< 0.001	
Chromium	0.006	
Copper	0.007	
Iron	7.4	
Lead	0.084	
Mercury	< 0.0001	
Nickel	0.007	
Selenium	0.003	
Silver	< 0.001	

0.032

Units	Date of Analysis	Method	Analyst
mg/L	4/25/06	7196A	DS
mg/L	4/26/06	200 8	DS
mg/L	4/26/06	200,8	DS
mg/L	4/26/06	200.8	DS
mg/L	4/26/06	200.8	DS
mg/L	4/26/06	200.8	DS
mg/L	4/26/06	200.8	DS
mg/L	4/26/06	200.8	DS
mg/L	4/26/06	200.8	DS
mg/L	4/26/06	200.8	DS
mg/L	4/26/06	200.8	DS
mg/L	4/26/06	200.8	DS
mg/L	4/26/06	200.8	DS

RELINQUISHED BY DATE

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Page		VI	

#### CHAIN-OF-CUSTODY RECORD

REQUESTED ANALYSIS

58. H. M. C. J. H.			1	. Vo			مرسور	SVOC	TCLD	METALE		Luca Canada Cana	of the same of the Market State of
TEM #   FOR LAB   USE ONLY   SAMPLE 1.D.		MATRIX A-AIA S-SOIL GW-GROUND WATER SW-SUPERCE WATER DW-DRINKING WATER OTHER GOOG	꽃 미급 5	C SO21B Accounts	C	CHERNOR CHENGE FENOR FENOR CHECK	SEALTHON CHOS CLYMICS SEALTHON CHOS CHASS	CTPH fare   CIPH	COTOLP 1311 CARR CHEME CONCINCTONS CONCINCTONS CONSTRUCTORS	CDisserts Heas (Ust Below)	TDS CDSO, CMO2/NO3 . CITUSBIDIT	CLROUD  CD, AU CDROES, ALC  CLOSS, ALC  CLOSS, ALC  CLOSS, ALC  CLOSS AC  CL	C. FLUNDON CONTRIBUTION  C. FLOWING CO.
Preservative: H-HCl; N-HNO <sub>3</sub> ;									TOWNS IN SEC. OF SEC. OF				111 / A1 / A2 / A2 / A3 / A3 / A3 / A3 / A3 / A3
S-H <sub>2</sub> SO <sub>4</sub> ; Na-NaOH; M-MEOH			14	:							· · · · · · · · · · · · · · · · · · ·		
COMPANY Albert Engineering.  ADDRESS 18 Chene 11 Drive  CITY Concord STAT  PHONE 603 224.4182  FAX 603.324.3707  E-MAIL Cheiner andrisenyi  SITE NAME Morphy & Mobil  PROJECT # 49400.19  STATE: SENH OMA* OME OVE	EXT ZIP <u>033</u> EXT	·O.	Disse I. An Per of 2. To	DIVED ME  NO  Sam  ful I  romin  et l  et l  for	TALS FIRE  OTES: (IE  OFE  OFE  OFE  OFE  OFE  OFE  OFE  O	Resolution	elui ered?	OYES OI	No		TAT remainder no, total cury, Not	RESULTS NEEDED BY (ENTER PREHE (GUARARTEED RAPID TURNAROUND NEEDS PRE- QA/QC REPORTING LEVEL  DA DB DC  DMA DATA ERHANCEHENT PACKAGE*  QUOTE # 1004253  P.O. #  SAMPLER(S) DATE  RELINQUISHED BY DATE	APPROVAL)  REPORTIN  WHARD  ELECTRO  RE-MAIL  Ba H/y



**8. Signature Requirements:** The Notice of Intent must be signed by the operator in accordance with the signatory requirements of 40 CFR Section 122.22, including the following certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I certify that I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Facility/Site Name: Murphy's Mobil

Operator signature:

Title: Project Manager

Date: 5/8/06